

**OBVERSE/REVERSE DISCRIMINATIVE RECTANGULAR  
NITRIDE SEMICONDUCTOR WAFER**

**ABSTRACT OF THE DISCLOSURE**

A mirror-polished obverse surface and a roughened reverse surface of the  
5 conventional GaN wafers have been discriminated by difference of roughness on the surfaces  
with human eyesight. The difference of the surfaces is rather ambiguous. Cracks/breaks  
and distortion of the wafers have been likely to occur because the roughness of the reverse  
surface is apt to bring fine particles.

To discern an obverse from a reverse without making use of the difference of the  
10 surface roughness, the present invention provides an obverse/reverse discriminative  
rectangular nitride semiconductor wafer having a longer slanting edge and a shorter slanting  
edge at obversely-clockwise neighboring corners, or having an asymmetric slanting edge at a  
corner, or having asymmetrically bevelled parts or having discriminating characters marked  
by laser. The present invention can make the reverse surface mirror-polished and smooth, so  
15 that particles on the reverse surface and distortion, cracks or breaks of the wafer decrease.